



# 2011 CHILD FATALITY REVIEW FOR PINAL COUNTY

### **DEMOGRAPHICS**

This report provides information on the deaths of children who were residents of Pinal County. During 2011, there were 51 deaths among children younger than 18 years of age in Pinal County. Males accounted for 55 percent of child deaths (n=23) and females accounted for 45 percent (n=28). Figure 1 shows deaths among children by sex and age group.

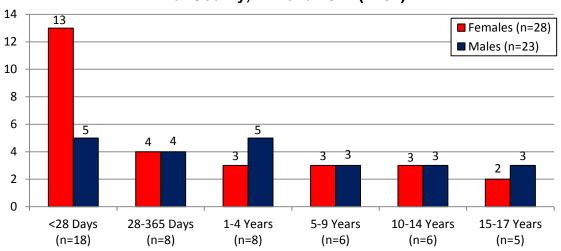


Figure 1. Deaths Among Children by Sex and Age Group, Pinal County, Arizona 2011 (n=51)

Deaths were over-represented among Hispanic and African American children in Pinal County. Hispanic children comprised 36 percent of the population in this county but 47 percent of the fatalities (n=24). African American children comprised six percent of the population, but eight percent of the child fatalities (n=4). White, Non-Hispanic children comprised 48 percent of the population and 41 percent of the fatalities (n=21). American Indian children comprised eight percent of the population and four percent of the fatalities (n=2).

## **CAUSE AND MANNER OF CHILD FATALITIES**

Cause of death refers to the injury or medical condition that resulted in death (e.g. firearm-related injury, pneumonia, cancer). Manner of death is not the same as cause of death, but specifically refers to the intentionality of the cause. For example, if the cause of death was a firearm-related injury, then the manner of death may have been intentional or unintentional. If it was intentional, then the manner of death was suicide or homicide. If it was unintentional, then the manner of death was an accident. In some cases, there was insufficient information to determine the manner of death, even though the cause was known. It may not have been clear that a firearm death was due to an accident, suicide, or homicide, and in these cases, the manner of death was listed as undetermined. Manners of death include:

- natural (e.g., cancer)
- accident (e.g., unintentional car crash)
- homicide (e.g., assault)
- suicide (e.g., self-inflicted intentional firearm injury)
- undetermined

Sixty-one percent of deaths were due to natural manners (n=31). Twenty-seven percent of deaths were due to accidents (n=14). Four percent of child fatalities were due to suicide (n=2) and 8 percent were of an undetermined manner. There were no deaths due to homicide among children in 2011 in Pinal County. Figure 2 shows deaths among children by manner.

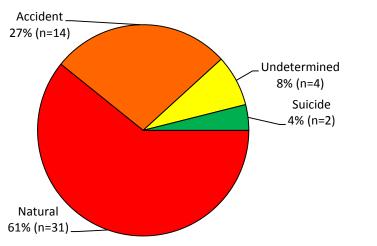


Figure 2. Deaths Among Children by Manner, Pinal County, Arizona 2011 (n=51)

Thirty-one deaths were due to medical causes, including prematurity. Ten children died in motor vehicle crashes, 3 children died due to drowning, 2 children died by hanging, 1 child died by suffocation and another by firearm during 2011 in Pinal County. Table 1 shows deaths among children by cause and manner.

Table 1. Deaths Among Children by Cause and Manner, Pinal County, Arizona 2011 (n=51)							
Cause	Natural	Accident	Suicide	Undetermined	Total		
Medical*	20	0	0	1	21		
Prematurity	11	0	0	1	12		
Motor Vehicle Crash	0	10	0	0	10		
Firearm	0	0	0	1	1		
Suffocation	0	1	0	0	1		
Drowning	0	3	0	0	3		
Hanging	0	0	2	0	2		
Undetermined	0	0	0	1	1		
Total	31	14	2	4	51		

Among the 10 motor vehicle crash/transport deaths, one child was a driver, three were passengers and the location of one child was unknown. Among the motor vehicle occupants, one was in the front seat, one child was in the back seat and the seating position of one child is unknown. Additionally, in Pinal County, two children died riding ATVs and three child died in air transport.

#### **PREVENTABILITY**

Child fatality review teams consider a child's death preventable if something could have been done (by an individual such as the caregiver or supervisor, or by the community as a whole) that would have prevented the death. The local child fatality review team determined that 29 percent of the deaths among Pinal County children could have been prevented (n=15).

During the review of each child's death, teams identify factors believed to have contributed to the death. Although the presence of a contributing factor typically led to the determination that a death was preventable, this was not always the case. For example, the team might have concluded that an unsafe sleep environment (e.g. infant left sleeping on a couch) was a contributing factor in an unexpected infant death. However, the team may not have had sufficient information (e.g. autopsy report, adequate scene investigation) to determine if the death could have been prevented.

In Pinal County, drugs and/or alcohol was a contributing factor for 16 deaths (31 percent). Improper or lack of restraint use was a contributing factor for 5 deaths (10 percent). Lack of supervision was a contributing factor for 3 deaths (6 percent), and excessive driving speed was also a factor for 3 deaths (6 percent). Co-sleeping contributed to the death of one infant (2 percent). More than one factor may have been identified for each death. Table 2 shows the most common factors contributing to the deaths of child residents of Pinal County.

Table 2. Contributing Factors for Deaths Among Children, Pinal County, Arizona 2011					
Factor*	Number	Percent			
Substance use	16	31%			
Vehicle restraint	5	10%			
Lack of supervision	3	6%			
Excessive speed	3	6%			
Co-sleeping	1	2%			
*More than one factor may have been identified for each death					

## CHILD FATALITIES IN PINAL COUNTY COMPARED TO OTHER ARIZONA COUNTIES

This section provides comparisons between the deaths of children who resided in Pinal County and the deaths of children who resided in the remaining 14 Arizona counties. During 2011, 51 children who were residents of Pinal County died, and 757 children died who were residents of the other 14 counties. Pinal County had a crude rate of 50.0 child deaths per 100,000 residents, a higher rate than the remainder of the state (49.2 deaths per 100,000 residents).

Pinal County had a lower percentage of preventable deaths compared to the remaining counties. Twenty nine percent of the deaths among Pinal County children could have been prevented (n=15), compared to over one-third of child deaths in the remaining counties (35 percent, n=265).

Medical conditions, such as pneumonia or asthma, were the leading cause of death for children in Pinal County during 2011 (41 percent) as well as for the remaining counties (41 percent). Prematurity was second leading cause of child deaths in Pinal County (24 percent) and also in the remaining counties (24 percent). MVC/Transport deaths comprised 20 percent of child deaths in Pinal County but only 7 percent for the remainder of Arizona. Drowning were also higher in Pinal County (6 percent) compared to only 4 percent in the remaining counties. Table 3 shows the causes of child deaths for Pinal County compared to the rest of Arizona.

Table 3. Causes of Child Deaths, Pinal County, Arizona 2011						
Pinal County (n=51)		Arizona, Excluding Pinal County (n=757)				
Cause	Percent of Deaths	Cause	Percent of Deaths			
Medical	41%	Medical	41%			
Prematurity	24%	Prematurity	24%			
MVC/Transport	20%	MVC/Transport	7%			
Drowning	6%	Drowning	4%			
Hanging	4%	Hanging	3%			
Firearm	2%	Firearm	3%			
Suffocation	2%	Suffocation	6%			
Undetermined	2%	Undetermined	5%			

In Pinal County, during 2011, there was a lower percentage of natural deaths (61 percent) than in the remaining counties (65 percent). Deaths due to accidents was significantly higher among Pinal County children (27 percent) than in the remaining 14 Arizona Counties (19 percent). The percentage of child deaths due to suicide was slightly lower (4 percent) than the remainder of Arizona (5 percent). There were no homicides among Pinal County children during 2011. Table 4 shows deaths among children by manner for Pinal County compared to the rest of Arizona.

Table 4. Deaths Among Children by Manner, Pinal County, Arizona 2011						
Pinal County (n=51)		Arizona, Excluding Pinal County (n=757)				
Manner	Percent of Deaths	Manner	Percent of Deaths			
Natural	61%	Natural	65%			
Accident	27%	Accident	19%			
Suicide	4%	Suicide	5%			
Homicide	0%	Homicide	5%			
Undetermined	8%	Undetermined	6%			
Unknown	0%	Unknown	<1%			